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**AMENDMENTS TO THE CLAIMS**

Claim 1 (currently amended): A method for controlling an operating temperature of a  
5 computer system, the method comprising:  
monitoring a rotational speed of at least a cooling fan of the computer system,  
the rotational speed of the cooling fan being controlled by a fan power;  
monitoring a vital temperature of the computer system; and  
calculating a change in the vital temperature; and  
10 setting the fan power based on the calculated change in the vital  
temperature; wherein when the change in the vital temperature is  
negative, the fan power is reduced to reduce the fan rotational speed;  
and when the change in the vital temperature is positive, the fan power  
is increased to increase the fan rotational speed.

15 Claim 2 (original): The method of claim 1 wherein setting the fan power further  
comprises:  
increasing the fan power by a first power when the vital temperature  
increases by a first temperature, the first power being directly  
20 proportional to the first temperature.

Claim 3 (original): The method of claim 1 wherein setting the fan power further  
comprises:  
decreasing the fan power by a second power when the vital temperature  
25 decreases by a second temperature, the second power being directly  
proportional to the second temperature.

Claim 4 (original): The method of claim 1 wherein setting the fan power further  
comprises:  
30 maintaining the fan power when the vital temperature increases and the vital  
temperature is below a set temperature;  
maintaining the fan power when the vital temperature remains constant and

the vital temperature is above the set temperature; and  
decreasing the fan power by a third power when the vital temperature  
remains constant and the vital temperature is below the set temperature.

- 5    Claim 5 (original): The method of claim 4 further comprising resetting the fan power to a fixed fan power corresponding to a fixed fan speed when the set fan speed differs from the fixed fan speed and the vital temperature differs from the set temperature by at least a predetermined amount.
- 10   Claim 6 (original): The method of claim 1 further comprising detecting a cooling fan maximum rotational speed and a corresponding maximum fan power such that setting the fan power is according to a percentage of the cooling fan maximum rotational speed.
- 15   Claim 7 (original): The method of claim 1 wherein the at least a cooling fan includes a CPU cooling fan of a CPU of the computer system and an auxiliary cooling fan of the computer system, and the vital temperature is obtained from an on-die thermal monitoring transistor of the CPU.
- 20   Claim 8 (original): The method of claim 1 wherein the cooling fan is a power supply cooling fan of a power supply of the computer system, and the vital temperature is obtained from an on-die thermal monitoring transistor of the CPU.
- 25   Claim 9 (original): The method of claim 1 wherein the at least a cooling fan includes a CPU cooling fan of a CPU of the computer system, an auxiliary cooling fan of the computer system, and a power supply cooling fan of a power supply of the computer system, and the vital temperature is obtained from an on-die thermal monitoring transistor of the CPU.
- 30   Claim 10 (original): The method of claim 1 wherein setting the fan power is controlled by a relation stored in a random access memory or hard disk and accessible by an operating system during an operating system execution of the computer system.

Claim 11 (original): The method of claim 1 wherein setting the fan power is controlled by a relation stored in a BIOS memory and accessible by a BIOS of the computer system during a POST or boot of the computer system.

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Claim 12 (currently amended): A cooling system for a computer system, the cooling system comprising:

at least a cooling fan for providing cooling to the computer system;

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a fan input-output module electrically connected to the fan for transmitting a control signal to the fan, the control signal controlling the rotational speed of the fan;

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a chipset interface electrically connected to the fan input-output module for calculating a change in a vital temperature, generating the fan control signal based on at the calculated change in at the vital temperature of the computer system, and outputting the fan control signal to the fan input-output module;

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a controller electrically connected to the chipset interface for receiving the vital temperature and forwarding the vital temperature to the chipset interface; and

a temperature transducer for measuring the vital temperature and outputting the vital temperature to the controller.

Claim 13 (original): The cooling system of claim 12 further comprising:

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a memory electrically connected to the chipset interface for storing at least a relation relating the fan control signal to the vital temperature.

Claim 14 (original): The cooling system of claim 13 wherein the memory is a random access memory or a hard disk and is accessible by an operating system of the computer system.

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Claim 15 (original): The cooling system of claim 13 wherein the memory is a BIOS memory accessible by a BIOS of the computer system during a POST or boot of

the computer system.

Claim 16 (original): The cooling system of claim 12 wherein the at least a cooling fan includes a CPU cooling fan of a CPU of the computer system and an auxiliary  
5 cooling fan of the computer system, and the temperature transducer is an on-die thermal monitoring transistor of the CPU.

Claim 17 (original): The cooling system of claim 12 wherein the cooling fan is a power supply cooling fan of a power supply of the computer system, and the  
10 temperature transducer is an on-die thermal monitoring transistor of the CPU.

Claim 18 (original): The cooling system of claim 12 wherein the at least a cooling fan includes a CPU cooling fan of a CPU of the computer system, an auxiliary cooling fan of the computer system, and a power supply cooling fan of a power supply of  
15 the computer system, and the vital temperature is obtained from an on-die thermal monitoring transistor of the CPU.

Claim 19 (original): The cooling system of claim 12 further comprising a user interface electrically connected to the controller, the user interface comprising a  
20 display device and an input device for receiving control parameters from an external source; wherein the controller references the control parameters to generate the fan control signal.

Claim 20 (currently amended): A method for controlling an operating temperature of a  
25 computer system, the method comprising:

monitoring a rotational speed of a cooling fan installed in a power supply of the computer system, the rotational speed of the cooling fan being controlled by a fan power;  
monitoring a vital temperature of the computer system; and  
30 calculating a change in the vital temperature; and  
setting the fan power according to the calculated change in the vital temperature to control the rotational speed of the power supply cooling

fan.

Claim 21 (original): The method of claim 20 wherein setting the fan power further comprises:

- 5           increasing the fan power by a first power when the vital temperature increases by a first temperature, the first power being directly proportional to the first temperature.

Claim 22 (original): The method of claim 20 wherein setting the fan power further comprises:

- 10           decreasing the fan power by a second power when the vital temperature decreases by a second temperature, the second power being directly proportional to the second temperature.

Claim 23 (original): The method of claim 20 wherein setting the fan power further comprises:

- maintaining the fan power when the vital temperature increases and the vital temperature is below a set temperature;
- maintaining the fan power when the vital temperature remains constant and the vital temperature is above the set temperature; and
- 15           decreasing the fan power by a third power when the vital temperature remains constant and the vital temperature is below the set temperature.

Claim 24 (original): The method of claim 23 further comprising resetting the fan power to a fixed fan power corresponding to a fixed fan speed when the set fan speed differs from the fixed fan speed and the vital temperature differs from the set temperature by at least a predetermined amount.

Claim 25 (original): The method of claim 20 further comprising detecting a cooling fan maximum rotational speed and a corresponding maximum fan power such that setting the fan power is according to a percentage of the cooling fan maximum rotational speed.

Claim 26 (original): The method of claim 20 wherein the vital temperature is obtained from an on-die thermal monitoring transistor of a CPU of the computer system.

5 Claim 27 (original): The method of claim 20 wherein setting the fan power is controlled by a relation stored in a random access memory or hard disk and accessible by an operating system during an operating system execution of the computer system.

10 Claim 28 (original): The method of claim 20 wherein setting the fan power is controlled by a relation stored in a BIOS memory and accessible by a BIOS of the computer system during a POST or boot of the computer system.

Claim 29 (currently amended): A cooling system for a computer system, the cooling  
15 system comprising:

a cooling fan installed in a power supply of the computer system;  
a fan input-output module electrically connected to the fan for transmitting a control signal to the fan, the control signal controlling the rotational speed of the fan;

20 a chipset interface electrically connected to the fan input-output module for calculating a change in a vital temperature, generating the fan control signal based on a the calculated change in a the vital temperature of the computer system, and outputting the fan control signal to the fan input-output module;

25 a controller electrically connected to the chipset interface for receiving the vital temperature and forwarding the vital temperature to the chipset interface; and

a temperature transducer for measuring the vital temperature and outputting the vital temperature to the controller.

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Claim 30 (original): The cooling system of claim 29 further comprising:

a memory electrically connected to the chipset interface for storing at least a

relation relating the fan control signal to the vital temperature.

5 Claim 31 (original): The cooling system of claim 30 wherein the memory is a random access memory or a hard disk and is accessible by an operating system of the computer system.

10 Claim 32 (original): The cooling system of claim 30 wherein the memory is a BIOS memory accessible by a BIOS of the computer system during a POST or boot of the computer system.

Claim 33 (original): The cooling system of claim 29 wherein the temperature transducer is an on-die thermal monitoring transistor of a CPU of the computer system.

15 Claim 34 (original): The cooling system of claim 29 further comprising a user interface electrically connected to the controller, the user interface comprising a display device and an input device for receiving control parameters from an external source; wherein the controller references the control parameters to generate the fan control signal.

20 Claim 35 (new): A method for controlling an operating temperature of a computer system, the method comprising:  
monitoring a rotational speed of at least a cooling fan of the computer system, the rotational speed of the cooling fan being controlled by a fan power;  
25 monitoring a vital temperature of the computer system; and  
setting the fan power based on a change in the vital temperature; wherein when the change in the vital temperature is negative, the fan power is reduced to reduce the fan rotational speed; and when the change in the vital temperature is positive, the fan power is increased to increase the fan rotational speed;  
30 wherein setting the fan power further comprises:  
maintaining the fan power when the vital temperature increases and the vital temperature is below a set temperature;

maintaining the fan power when the vital temperature remains constant and the vital temperature is above the set temperature; and

decreasing the fan power by a third power when the vital temperature remains constant and the vital temperature is below the set temperature.

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Claim 36 (new): The method of claim 35 further comprising resetting the fan power to a fixed fan power corresponding to a fixed fan speed when the set fan speed differs from the fixed fan speed and the vital temperature differs from the set temperature by at least a predetermined amount.

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Claim 37 (new): A method for controlling an operating temperature of a computer system, the method comprising:

monitoring a rotational speed of a cooling fan installed in a power supply of the computer system, the rotational speed of the cooling fan being controlled by

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a fan power;

monitoring a vital temperature of the computer system; and

setting the fan power according to the vital temperature to control the rotational speed of the power supply cooling fan;

wherein setting the fan power further comprises:

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maintaining the fan power when the vital temperature increases and the vital temperature is below a set temperature;

maintaining the fan power when the vital temperature remains constant and the vital temperature is above the set temperature; and

decreasing the fan power by a third power when the vital temperature remains constant and the vital temperature is below the set temperature.

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Claim 38 (new): The method of claim 37 further comprising resetting the fan power to a fixed fan power corresponding to a fixed fan speed when the set fan speed differs from the fixed fan speed and the vital temperature differs from the set temperature by at least a predetermined amount.

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